



PROGRAMME ACTIVITY REPORT

Online Training Programme on Good Agricultural Practices, Replanting Programme and Integrated Pest Management to Sustain Coconut Development

03 November 2020

Zoom Meeting Platform

Executive Summary

1. The Non-Aligned Movement Centre for South-South Technical Cooperation (NAM CSSTC) and the International Coconut Community (ICC) have provided training to the Africa, Asia, Caribbean, Middle East and the Pacific member countries, moderated by Vincent Bernard Johnson from the Coconut Genetic Resources Network (COGENT) which involved presentations by resource persons and discussion between participants and resources persons on good agricultural practices, replanting programmes and integrated pest management to sustain coconut development.
2. The training results indicated that farmers need government financing and funding to control pests through the implementation of large-scale trapping programmes.

INTRODUCTION

The Non-Aligned Movement Centre for South-South Technical Cooperation (NAM CSSTC) and the International Coconut Community (ICC) have provided training to the Pacific, Middle East, Africa, Asia and Caribbean member countries. Practices of good agriculture, replanting programmes and integrated management have been introduced to trainees to support coconut production.

LOCATION AND TIME

The training took place online via the Zoom Meeting Platform on 3rd of November, 2020. The training programme, led by Mr. Vincent Bernard Johnson, moderator from the Coconut Genetic Resources Network (COGENT) involved presentations by resource persons and discussion between participants and resources persons.

TRAINING AGENDA

Appendix 1 demonstrates the training agenda.

RESULTS AND DISCUSSIONS

- It is hard to find a Good Agricultural Practices (GAPs) model. But components are available to construct a model. The existing practices is already excellent in India. However, this is only at the stage of research. The research result was primarily intended for use in the area observed. ICC, NAM CSSTC and other relevant parties therefore should generate the most current syntheses of extension knowledge on GAPs.
- Central Plantation Crops Research Institute (CPCRI) India encourages biologically fertilising bacteria. Bio-fertiliser application could also enhances growth. There is particular type of fungus (bio-inoculant) which increase the nutrient capacity of the soil.
- In addition to fertilisers, the planting of coconut should take sunlight into account. Plenty of sunlight, especially when the plant is grown in polybags, is essential requirement for any plant. It generates mostly healthier seedlings.
- Flood irrigation is not recommended due to the water volume and how diseases could spread by the flood.
- In contrary to GAPs, Integrated Pest Management (IPM) technology may be applicable for other countries.
- In coconut plants there are different forms of pests and diseases. When the tree reaches 3 – 15 years of age, beetle, mites, rodents will damage the coconut. Various pests and diseases will bring various losses at

different stages. The beetle is not serious until the tree reaches certain ages.

- To fully control the Rhinoceros beetle, naturally, farmers need to conduct IPM. Sri Lanka conducts an integrated approach when it comes to the Rhinoceros. The reason is because although the pests are in small yard, farmer who owns the yard cannot get rid of Rhinoceros simply by eradicating the breeding sites in the yard, since the beetles can normally move a lot. Beetles from other places can come to the yard. So farmers must form part of a strategy focused on the community. Farmers need government funding and support for various locations in small plantations, so that the government carries out large-scale trapping programmes. In Sri Lanka, the government has pheromone traps mounted. Sri Lanka concurrently uses integrated methods in a wide variety. It sets up large-scale pheromone traps covering 25 or more hectares.
- Rodents are number one pest that can bring damage to palm tree. To control rodents, farmers could use baiting and banding the tree, especially if the farmers already have correctly spaced coconut tree. In baiting, farmers could use toxic chemicals. At the stage of seedling, farmers could cover the seedling with ionics.
- Based on experience in Sri Lanka, fly also damages coconut tree. To date, Sri Lanka has seen three species, white flies are one among them. For some reason after season changes, the population of white flies has decreased and does not cause substantial coconut damage. Towards coconut researchers, Sri Lanka has several missions / projects to do.

EVALUATION

The assessment carried out with the participants showed:

- 67.6% of respondents reported receiving information about the training agenda before the start of training;
- 64.7% of respondents reported communication between participants were facilitated;

- 66.2% of respondents have indicated that the training is highly sensitive to participants' needs;
- 73.5% of respondents said that the training led to the advancement of participants in terms of education, professional or personal skills;
- 61% of respondents reported the training content was well organised and easy to follow;
- 61.8% of respondents showed great interest until the end of the training;
- 72.8% of the respondents said that the resource persons understood the subjects they raised;
- 74.3% of respondents reported the resource persons were well-prepared;
- A total of 67.6% respondents reported that training delivery is closely linked to the goals to be achieved;
- 42.6% of the respondents reported ample time allocation;
- 58.8% of respondents identified effective management of the Zoom Meeting platform.

Participants' Notes on the Sub-Topics

The information the speakers provided was understood by most of the participants. Several participants noted the importance for further clarification of bio-inoculants, lethal yellowing disease and fertilisers.

Participants' Interests in the Training Topic

To improve their capacities, participants intend to use their learnings about GAPs, particularly on crops selection and intercrop. They may want to use the information learned on the management of seeds, fertilisers, IPMs and some products from coconut derivatives. One participant expressed interest in exploring diagnostic tools, in particular regarding their application if accessible in the individual's country.

The participants were very interested in the presentation by the speaker from the University of Queensland, namely on the diagnostic method and ability to provide satellite-based surveillance of lethal yellowing in coconuts. Participants plan to participate in future meetings if IPM

researchers have new findings. Participants would like to hear more about replanting programmes.

Suggested Topics for the Next Training

59.6% of respondents recommended a quality control for processed coconut training. Other respondents recommended training on virgin coconut oil processing, coconut coir processing and marketing opportunities and coconut beverage processing and packaging.

CONCLUSION

It can generally be inferred that about 64.6% of participants expressed satisfaction with the training. The participants were very interested in the presentation on the diagnostic method and ability to provide satellite-based surveillance of lethal yellowing in coconuts. Respondents recommended a quality control for processed coconut training as well as training on virgin coconut oil processing, coconut coir processing and marketing opportunities and coconut beverage processing and packaging.

AGENDA



Online Training Program



Good Agriculture Practices, Replanting Program and Integrated Pest Management to Sustain Coconut Development

TIME SCHEDULE

Tuesday, November 3rd 2020 | 14.00 Hrs. - 16.00 Hrs. (Jakarta Time)

EVENT	PERSON	TIME
Introduction of Program	MR. VINCENT JOHNSON Interim COGENT Coordinator, ICC	3 Minutes
Invitation for the Welcome Speech	MR. VINCENT JOHNSON Interim COGENT Coordinator, ICC	1 Minutes
Welcome Speech	DR. JELFINA C. ALOUW Executive Director, ICC	5 Minutes
Presentation: "Sustainable Coconut Development for Better Future"	DR. PONCIANO A. BATUGAL Chair ICC Technical Working Group	15 Minutes
Presentation: "Good Agriculture Practices to Sustain Coconut Development"	DR. P. SUBRAMANIAN Principal Scientist CPCRI, India	15 Minutes
Presentation: "Integrated Pest Management to Sustain Coconut Development"	DR. NAYANIE S. ARATCHIGE Principal Entomologist CRI, Sri Lanka	15 Minutes
Presentation: "Satellite-Based Surveillance Method for Lethal Yellowing Disease and Tool for Detecting LYD"	PROF. JIMMY BOTELLA Professor of Plant Biotechnology The University of Queensland Brisbane Australia	15 Minutes
Discussion	Moderator & Participants	45 Minutes
Invitation for the Closing Remarks	MR. VINCENT JOHNSON Interim COGENT Coordinator, ICC	1 Minutes
Closing Remarks	AMBASSADOR DIAR NURBINTORO Acting Director, NAM CSSTC	5 Minutes

PHOTO DOCUMENTATION

Integrated Pest Management
Sustain Coconut Development

Essential Requisite

Keynote 5 Am...
Principal Scientist of...
Coconut Research Institute of...

Central signature for diseased tree
recognize a diseased tree?

MF fungus for Rhinoceros be...

WAY FORWARD

Collaboration with Coconut Alliances/Cooperatives in neighboring countries

Caribbean Pacific Commission (SPC with 22 member countries)
Caribbean coconut coalition with 11 members

Coalition for the Americas (CCA)
Coalition for Central and South America
Coalition for Africa

Technical assistance on priority projects

Crop habitat manipulation and diversification

Volatile confusion and disorientation
Pest and disease incidence can be lowered by careful integration of other non host crops and the crops that harbour natural enemies of the pests in the cropping system.

Why GAP is important for coconut

SHALL ALSO BE APPLIED

Stable coconut production
of degradation of natural resources over a long period of time.
renewal - long life 60 to 80 years

Integration of technologies- synergistic approach
including occupational hazard

One Health Approach (includes plant, animal, human and environment and human health)

JOINTS TO BE REMEMBERED WHILE SELECTING INTERCROPS

Intercrops should be selected according to their ability to tolerate a range of soil and nutrient conditions.
Avoid all monoculture as per requirements.
Intercrops should be selected from the same family as the coconut and not require any special care or inputs.
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Surveillance & Confirmation

essential to control and eradicate the disease
Will identify suspicious trees

Behavioural manipulation methods

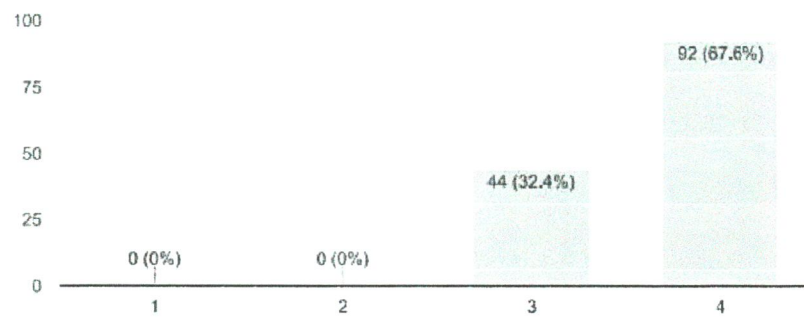
Image analysis
what you detect, it is how you analyze it
Difference Index (NDVI)

methoxy...
beetle for...
beetle for...
beetle for...

SURVEY STATS

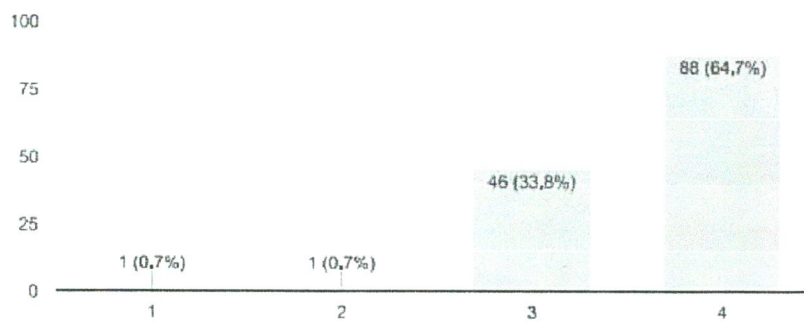
The curriculum / agenda was clearly specified.

136 responses



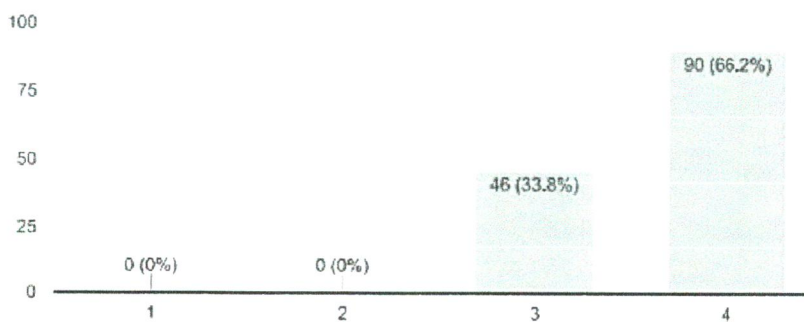
The organisers facilitated contact between participants.

136 responses



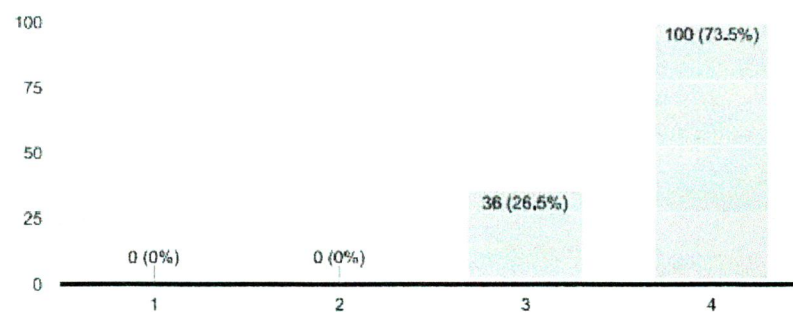
The training was attentive to participants' needs.

136 responses



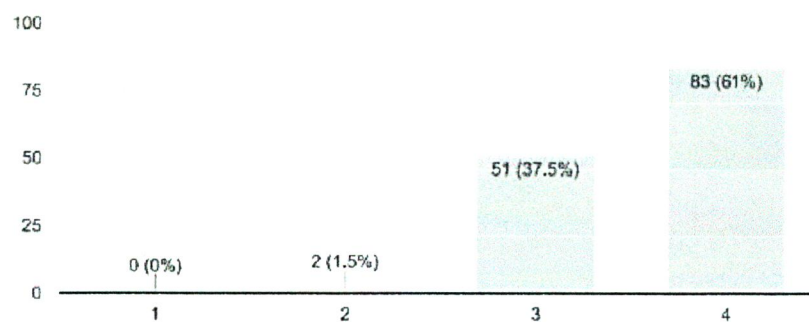
The training contributes to my education, professional and/or personal growth.

136 responses



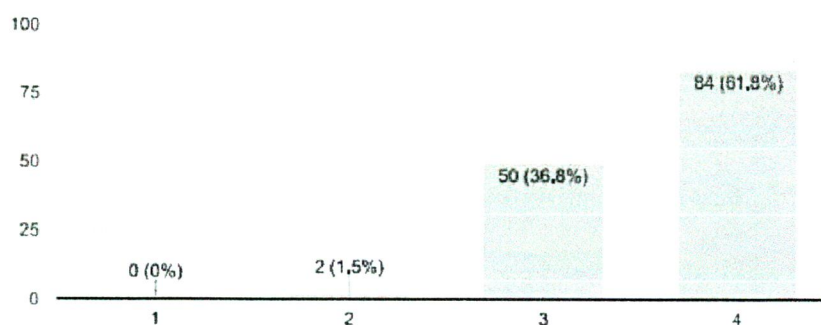
The contents were well arranged and easy to follow.

136 responses



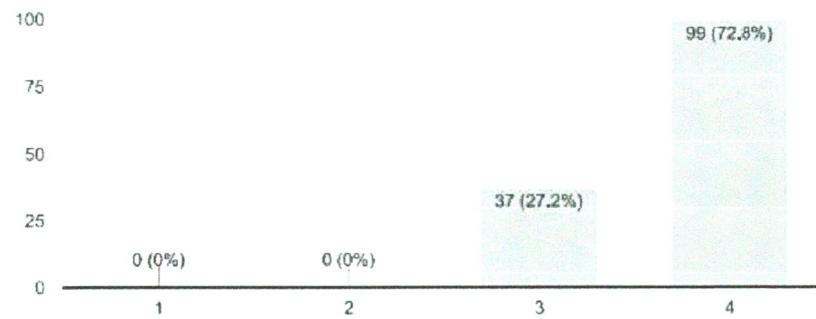
The training kept me engaged and interested.

136 responses



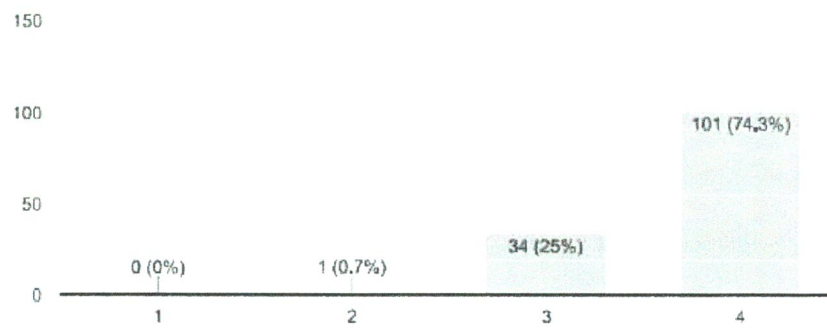
The trainers were familiar with the topics of training.

136 responses



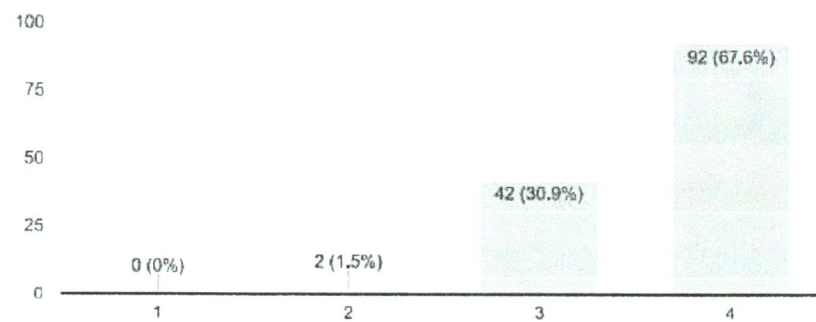
The trainers were well prepared.

136 responses



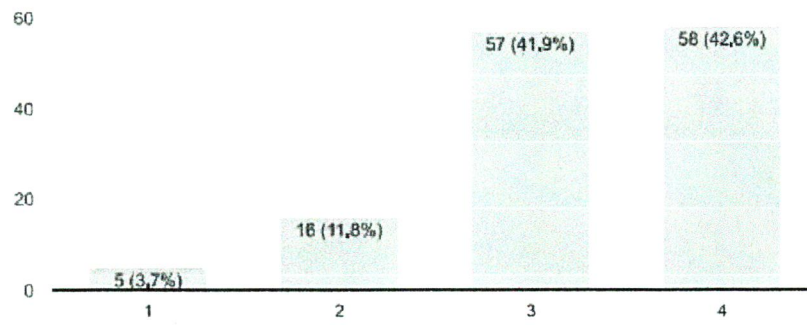
The activities related to the goals of training.

136 responses



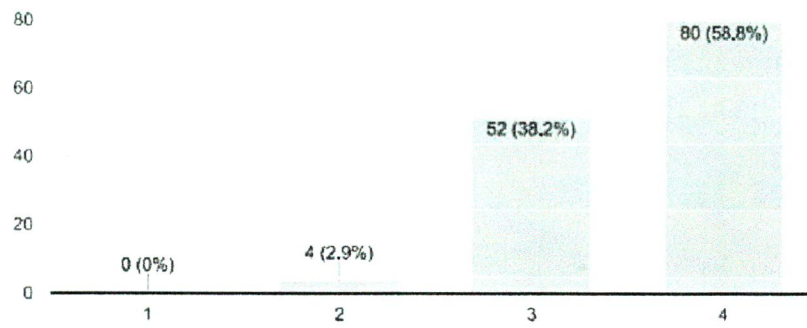
The training time allocation was enough.

136 responses

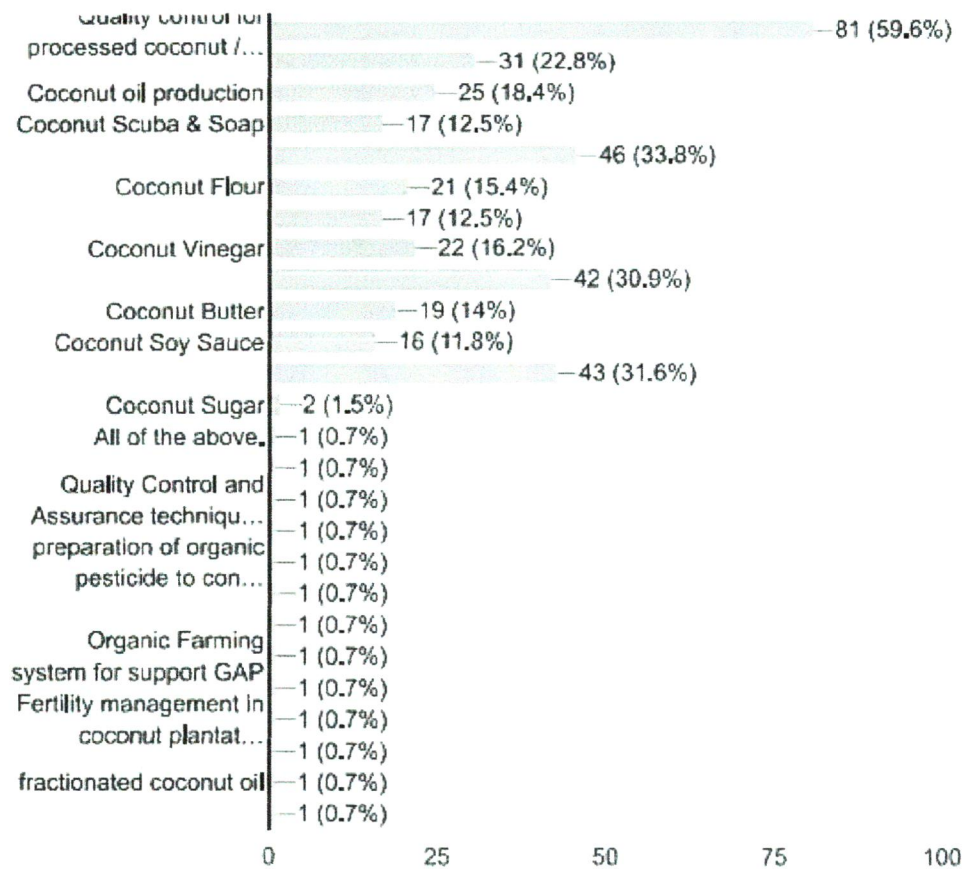


The management of the zoom meeting was convenient.

136 responses



What coconut training topic(s) are you looking for in the future?



***“STAY HEALTHY AND PRODUCTIVE DURING COVID-19 PANDEMIC” ONLINE TRAINING
SERIES AND WEBINAR PROJECT 2020***

LIST OF PARTICIPANTS' COUNTRY OF ORIGIN

IN THE IMPLEMENTATION OF THE “*GOOD AND AGRICULTURAL PRACTICES, REPLANTING PROGRAMMES AND INTEGRATED PEST MANAGEMENT TO SUSTAIN COCONUT DEVELOPMENT*” ONLINE TRAINING, EXTENSION OFFICERS, RESEARCHERS, COCONUT PRODUCERS AND INDIVIDUALS FROM THE FOLLOWING COUNTRIES REGISTERED:

**MEMBER COUNTRIES OF THE NON-ALIGNED MOVEMENT (NAM) AND / OR MEMBER COUNTRIES OF
THE INTERNATIONAL COCONUT COMMUNITY (ICC)**

NO.	COUNTRY (IN ALPHABETICAL ORDER)	NUMBER OF PERSON(S)
1.	FIJI	1
2.	GUYANA	2
3.	INDIA	21
4.	INDONESIA	29
5.	JAMAICA	1
6.	MICRONESIA (FEDERATED STATES OF)	1
7.	MOZAMBIQUE	3
8.	MYANMAR	1
9.	PAPUA NEW GUINEA	1
10.	PHILIPPINES	115
11.	SAUDI ARABIA	1
12.	SRI LANKA	9
13.	SURINAME	1
14.	TANZANIA	4
15.	THAILAND	1
16.	TONGA	1

PARTICIPANTS' BACKGROUND

NO.	BACKGROUND	NUMBER OF PERSON(S)
1.	GOVERNMENTAL	113
2.	HIGHER EDUCATION	36

***“STAY HEALTHY AND PRODUCTIVE DURING COVID-19 PANDEMIC” ONLINE TRAINING
SERIES AND WEBINAR PROJECT 2020***

NO.	BACKGROUND	NUMBER OF PERSON(S)
3.	PRIVATE SECTORS, INTERGOVERNMENTAL ORGANISATIONS, OTHERS	42